What is claimed is:

1. A magnetic recording medium comprising a magnetic layer which is sectioned into a plurality of data areas and a plurality of servo areas for information recording, wherein

in each of the servo areas, the magnetic layer is separated into a plurality of servo pattern unit parts for forming a predetermined servo pattern and a plurality of servo pattern gap filling parts/a servo pattern gap filling part patterned to fill gaps between the plurality of servo pattern unit parts partly.

2. The magnetic recording medium according to claim 1, wherein

the servo pattern unit parts and the servo pattern gap filling parts/part are formed in different sizes so as to have different magnetic properties.

3. The magnetic recording medium according to claim 2, wherein

the servo pattern unit parts and the servo pattern gap filling parts/part are formed in different sizes so as to have different coercivities as the magnetic properties.

4. The magnetic recording medium according to claim 2, wherein

the servo pattern unit parts and the servo pattern gap filling parts/part are formed in different sizes so as to have different magnetic anisotropies as the magnetic properties.

5. The magnetic recording medium according to claim 2, wherein

the servo pattern unit parts and the servo pattern gap filling parts/part are formed in different sizes so as to have different residual magnetizations as the magnetic properties.

6. The magnetic recording medium according to claim 1, wherein:

in each of the data areas, the magnetic layer is separated into a number of recording elements; and

the servo pattern gap filling parts/part are/is formed so that the ratio of the total area of the servo pattern unit parts and the servo pattern gap filling parts/part in each of the servo areas has a value closer to the ratio of the area of the recording elements in each of the data areas than to the ratio of the area of the servo pattern unit parts in each of the servo areas.

7. The magnetic recording medium according to claim 2, wherein:

in each of the data areas, the magnetic layer is separated into a number of recording elements; and

the servo pattern gap filling parts/part are/is formed so that the ratio of the total area of the servo pattern unit parts and the servo pattern gap filling parts/part in each of the servo areas has a value closer to the ratio of the area of the recording elements in each of the data areas than to the

ratio of the area of the servo pattern unit parts in each of the servo areas.

8. The magnetic recording medium according to claim 3, wherein:

in each of the data areas, the magnetic layer is separated into a number of recording elements; and

the servo pattern gap filling parts/part are/is formed so that the ratio of the total area of the servo pattern unit parts and the servo pattern gap filling parts/part in each of the servo areas has a value closer to the ratio of the area of the recording elements in each of the data areas than to the ratio of the area of the servo pattern unit parts in each of the servo areas.

9. The magnetic recording medium according to claim 4, wherein:

in each of the data areas, the magnetic layer is separated into a number of recording elements; and

the servo pattern gap filling parts/part are/is formed so that the ratio of the total area of the servo pattern unit parts and the servo pattern gap filling parts/part in each of the servo areas has a value closer to the ratio of the area of the recording elements in each of the data areas than to the ratio of the area of the servo pattern unit parts in each of the servo areas.

10. The magnetic recording medium according to claim 5,

wherein:

in each of the data areas, the magnetic layer is separated into a number of recording elements; and

the servo pattern gap filling parts/part are/is formed so that the ratio of the total area of the servo pattern unit parts and the servo pattern gap filling parts/part in each of the servo areas has a value closer to the ratio of the area of the recording elements in each of the data areas than to the ratio of the area of the servo pattern unit parts in each of the servo areas.

11. The magnetic recording medium according to claim 1, wherein:

in each of the data areas, the magnetic layer is separated into a number of recording elements at fine track pitches in a direction vertical to the traveling direction of a write/read head; and

the servo pattern gap filling parts/part are/is patterned to lie at least in part near the data areas in the servo area.

12. The magnetic recording medium according to claim 2, wherein:

in each of the data areas, the magnetic layer is separated into a number of recording elements at fine track pitches in a direction vertical to the traveling direction of a write/read head; and

the servo pattern gap filling parts/part are/is patterned

to lie at least in part near the data areas in the servo area.

13. The magnetic recording medium according to claim 1, wherein

the servo pattern gap filling parts/part are/is formed smaller than the servo pattern unit parts.

14. The magnetic recording medium according to claim 1, wherein

the servo pattern unit parts and the servo pattern gap filling parts/part are magnetized in opposite polarities.

15. The magnetic recording medium according to claim 3, wherein

the servo pattern unit parts and the servo pattern gap filling parts/part are magnetized in opposite polarities.

16. A magnetic recording medium comprising a magnetic layer which is sectioned into a plurality of data areas and a plurality of servo areas for information recording, wherein

in each of the servo areas of the magnetic layer, servo pattern unit parts for forming a predetermined servo pattern are separated in a direction vertical to the traveling direction of a write/read head.

17. The magnetic recording medium according to claim 16, wherein

the servo pattern unit parts are separated so as to have a length greater than or equal to a track width in a direction vertical to the traveling direction of a write/read head.

18. The magnetic recording medium according to claim 16, wherein

the servo pattern unit parts are separated so as to have a length greater than or equal to a track width, but not exceeding 0.2 mm, in the direction vertical to the traveling direction of the write/read head.

19. A method of manufacturing a magnetic recording medium, comprising:

a magnetic layer forming step of forming a uniform magnetic layer on a substrate; and

a magnetic layer processing step of separating the magnetic layer into a plurality of servo pattern unit parts for forming a predetermined servo pattern and a plurality of servo pattern gap filling parts or a servo pattern gap filling part for filling gaps between the plurality of servo pattern unit parts partly, and forming the servo pattern unit parts and the servo pattern gap filling parts/part in different sizes so as to have different magnetic properties.

20. The method of manufacturing a magnetic recording medium according to claim 19, wherein:

in the magnetic layer processing step, the servo pattern unit parts and the servo pattern gap filling parts/part are formed in different sizes so as to have different coercivities as the magnetic properties; and

the magnetic layer processing step is followed by a first

direct-current magnetic field applying step of applying a uniform direct-current magnetic field higher than the coercivities of both the servo pattern unit parts and the servo pattern gap filling parts/part to the magnetic layer, and a second direct-current magnetic field applying step of applying a uniform direct-current magnetic field having an intensity intermediate between the coercivity of the servo pattern unit parts and the coercivity of the servo pattern gap filling parts/part to the magnetic layer in a direction opposite to that of the foregoing direct-current magnetic field.